

ABSTRACT

1 In a network of digital signal processor nodes connected
2 in a peer-to-peer relationship, a data packet sent to a node
3 causes a return transmission from that node. The requestor
4 digital signal processor sends a data packet to a target
5 digital signal processor. Upon arrival at the target digital
6 signal processor, its receiver drives the arriving request
7 packet into an I/O memory and triggers a transmitter
8 interrupt. Next, the pull interrupt causes the transmitter to
9 execute on a next packet boundary the pull request packet.
10 Finally, the execution of the pull request causes the
11 transmitter to pull a portion of the local I/O memory and send
12 it back to the requestor digital signal processor. The same
13 physical portion of the I/O memory is overlaid with two
14 logical uses, a receiver channel and a transmitter code block.